

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Dewald

Art Unit: 2872

Serial No.: 09/750,640

Examiner: Robinson, Mark A.

Filed: 12/28/2000

Docket No.: TI-30205

For:

ROD INTEGRATORS

REPLY BRIEF UNDER 37 C.F.R. § 1.193

June 23, 2003

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

MAILING CERTIFICATE UNDER 37 C.F.R. ±1.8(A) I hereby certify that the above correspondence is being deposited with the U.S. Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on the date shown

Dear Sir:

The following Reply Brief is respectfully submitted, in triplicate, in connection with the above-identified application in response to the Examiner's Answer, mailed April 22, 2003. Please charge all required fees to deposit account 20-0668.

## **ARGUMENTS**

The Examiner has clarified the rejection by stating in the Examiner's Answer, "Kaplan teaches in column 4 the integrator to be of either hollow or solid construction (made of glass), thus operating by either reflection or total internal reflection." "Further. as noted in the rejection, Kaplan teaches in column 4 a solid glass arrangement for the device which is seen to satisfy the requirement for a "solid" body. Thus, the limitations of claim 7 are seen to be met by Kaplan. Appellant has argued with respect to claim 19 that Kaplan does not teach total internal reflection in the device. In response, attention

should be directed to Kaplan column 4 line 41 which teaches total internal reflection in the device."

The applicant respectfully submits that column 4 of Kaplan, lines 30 through 42, teaches "a solid compound parabolic concentrator" (40' of Figure 3B) as an alternative to the "high collection non-imaging optical device" (40 of Figures 1 and 2). Thus, although not shown in the Figures of Kaplan, the solid compound parabolic concentrator 40' appears to be an alternative to the left portion of the body 14 shown in Figure 2—not a replacement for the body 14 of Figure 2. While this portion (40') of Kaplan is taught as being solid and exhibiting total internal reflection, the Examine has ignored the remaining elements in the base claim while using the solid compound parabolic collector of Kaplan. Kaplan's device in combination with the solid compound parabolic collector cannot be interpreted as having the limitations recited by claims 1 in combination with claims 16 and 19.

With respect to claims 1 and 16, Kaplan does not show, teach, or suggest "an entrance face on a first end of said elongated body" wherein "said elongated body is a solid transparent body" with "a mirrored entrance aperture at said entrance face." Instead, Kaplan has a solid elongated body followed by a separate cavity with a highly reflective inner surface. The Examiner has attempted to classify the internal surfaces of the cavity (12) as the mirrored entrance aperture or to classify the entire length of the high collection non-imaging optical device replaced by the solid compound parabolic concentrator as the "entrance face" (see Examiner's Appendix A and B). The later interpretation completely ignores the common meaning of the term "face" in an attempt to read the claim on Kaplan.

With respect to claims 1 and 19, Kaplan does not show, teach, or suggest "an entrance face on a first end of said elongated body" with "a mirrored entrance aperture at said entrance face" wherein "light traveling through said elongated body is reflected by total internal reflection." Instead, Kaplan has a solid elongated body followed by a separate cavity with a highly reflective inner surface.

The Examiner stated, "Kaplan teaches the surface in question to be 'highly reflective.' Since this surface is 'highly reflective,' it is seen to satisfy the definition of "reflecting a large fraction of incident light" as set forth in the dictionary citation provided by appellant. Therefore, the surface of Kaplan is seen to meet the limitation of a 'mirrored portion."

This is a somewhat disingenuous reading of Kaplan and the definition provided by the applicant. Twice Kaplan uses the term "highly reflective." In one instance Kaplan states, "the light-contacting surfaces within the cavity 12 are painted with Spectraflect[TM] paint which is a highly reflective diffuse white paint." In the other instance Kaplan states, "All internal surfaces of cavity 12, including surfaces of baffle 36, are highly reflective diffuse surfaces." Thus Kaplan teaches highly reflective diffuse surfaces. The definition referred to by the Examiner described "A surface which specularly reflects a large fraction of incident light" (emphasis added).

Returning these two limitations to the teachings of Kaplan and the definition, clarifies that the Examiner's assertion that "Since this surface is 'highly reflective,' it is seen to satisfy the definition of "reflecting a large fraction of incident light" as set forth in the dictionary citation provided by appellant," cannot be correct since Kaplan clearly

teaches a highly reflective <u>diffuse</u> surface that cannot satisfy the definition of "a surface which specularly reflects" and therefore cannot anticipate under 35 U.S.C. § 102(b).

## **CONCLUSION**

For the foregoing reasons, Appellants respectfully submit that the Examiner's final rejection of Claims 1, 2, 5, 6, and 15-20 under 35 U.S.C. § 102(b) as being anticipated by Kaplan, and Claims 3, 4, 7, and 10-13 under 35 U.S.C. § 103(a) as being unpatentable over Kaplan is improper, and it is respectfully requested that the Board of Patent Appeals and Interferences so find and reverse the Examiner's rejection.

Respectfully submitted,

Charles A. Brill

Attorney for Applicant

Reg. No. 37,786

Texas Instruments Incorporated P.O. Box 655474 M/S 3999 Dallas, TX 75265 (972) 917-4379

FAX: (972) 917-3511